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#### Response to Office Action Examiner: Sathyanaraya R. Pannala Group Art Unit: 2164

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**INVENTORS:** 

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TITLE:

Data Products of Processes of Extracting Role Related Information

From Free Text Sources

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## Amendment and Claims Listing

Please amend the abstract as follows:

The invention permits interpretation and structuring of free text records utilizing [0082] several types of extractions, and it permits integrating interpretive extractions with structured data into unified structures that can then be analyzed with data mining and data visualization tools.

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Please amend the claims as follows:

Claim 1 (currently amended)

1. A product of a process of producing structured data from unstructured free text, said process product comprising accessing at least one storage media device including having a database of integrated data, said product produced by an integration process comprising the steps of:

accessing a source of unstructured data, the unstructured data including free text; identifying text records within the free text;

parsing the identified text records at the clause or sentence level;

identifying roles within the parsed text records, said identifying producing <u>multi-dimensional</u> attribute extractions, each of said attribute extractions containing attribute information of the derived source text, <u>and said multi-dimensional attribute extractions yielding at least two attributes for each extraction, and</u>

applying caseframes to the attribute extractions, said applying caseframes producing a filtered set of attribute extractions; and producing a structured data element containing the filtered set of extractions.

Claim 2 (currently amended)

2. A product of the process recited in claim 1, wherein the process further comprises the step of identifying domains of the filtered set of attribute extractions.

Claim 3 (currently amended) 3. A product of the process recited in claim 2, wherein the process further comprises the step of assigning domain roles.

Claim 4 (currently amended)

4. A product of the process recited in claim 3, wherein the process further comprises the step of producing relation types.

Claim 5 (currently amended) 5. A product of the process recited in to claim 4, wherein the

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process further comprises the step of coalescing the produced relation types.

Claim 6 (currently amended) 6. A product of the process recited in claim 1, wherein the process further comprises the step of creating a new database containing the structured data element produced in said producing.

Claim 7 (currently amended) 7. A product of the process recited in claim 1, wherein the process further comprises the step of producing a new relational database containing the structured data element produced in said producing a structured data element.

Claim 8 (currently amended) 8. A product of the process recited in claim 1, wherein the process further comprises the step of producing a file containing the structured data element produced in said producing a structured data element.

Claim 9 (currently amended)

9. A product of the process recited in claim 8, wherein the process further comprises the step of producing a file having a format containing the structured data element selected from the group of XML, character separated values, spreadsheet formats and file-based database structures.

Claim 10 (currently amended) 10. A product of the process recited in claim 1, wherein the structured data element produced by the performance of said producing includes reference information to the original free text for construed data.

Claim 11 (currently amended) 11. A product of the process recited in claim 1, wherein the process further comprises the step of constructing a library containing extracted attributes.

Claim 12 (currently amended) 12. A product of the process recited in claim 1, wherein the process further comprises the step of constructing a library containing extracted relational facts.

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Claim 13 (currently amended) 13. A product of the process recited in claim 1, wherein the process further comprises the step of combining like relation types.

Claim 14 (currently amended) 14. A product of the process recited in claim 1, wherein the process further comprises the step of combining like attributes.

Claim 15 (currently amended) 15. A product of the process recited in claim 1, wherein the process further comprises the step of coalescing the identified attributes.

Claim 16 (currently amended) 16. A product of the process recited in claim 1, wherein the process further comprises the step of coalescing identified relation types

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Respectfully submitted this 19th day of November, 2006.

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